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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,592	08/05/2003	Akiya Kozawa	20301-1	6546

7590 10/31/2005

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EXAMINER	
WEINER, LAURA S	
ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/634,592	KOZAWA ET AL.	
	Examiner	Art Unit	
	Laura S. Weiner	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8-03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-13, 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1-2 and 18 are rejected because the specification on page 3 states that "the constitution of the lignin has not been clarified but is probably a polymerized coniferyl alcohol". The specification does not show support for broadly any "lignin". Claims 3-13 are rejected because the claims depend on claim 1.

2. Claims 1-13, 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-2 and 18 are rejected because the specification does not show or demonstrate on to make the "lignin" cited on page 3 of the specification. The specification states that "the constitution of the lignin has not been clarified but is probably a polymerized coniferyl alcohol". Claims 3-13 are rejected because the claims depend on claim 1.

3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-2 and 18 are rejected because although a product (lignin) of unknown structure can be clamed by a combination of physical and chemical characteristics. *Ex parte Brian et al.* 118 USPQ 242 reciting the physical and chemical characteristics of the clamed product (lignin) will not suffice where it is not certain that a sufficient number of characteristics have been recited that the claim reads only on the particular compound which the applicant has invented. *Ex parte Siddiqui* 156 USPQ 426; *Exparte Davission et al.* 133USPQ 400; *Ex parte Fox* 128 USPQ 157

Claim 3 is rejected because the claim is indefinite because of the language "at least one ...selected from the group comprising... and". The correct language should be instead "selected from the group consisting of... and". Also, polycrylic acid" should instead be "polyacrylic acid".

Claims 4, 8 and 10-13 are rejected because there is no antecedent basis for "contains at least one additional additive".

Claim 5 is rejected because there is no antecedent basis for "wherein the electrolytes". It is also unclear what is meant by "contains an antimony".

Claim 9 is rejected because it is unclear what is meant by "wherein the polymer is present in an about between about o,1%". Also, it is unclear what claim this should depend from.

Claim 14 is rejected because the claim is directed to a method of charging but there is no process step of charging but there is a method step of discharging. Also, it is unclear how the step of discharging can occur if there was never a step of charging.

Claim 16 is rejected because it is unclear what is meant by "wherein for deteriorated battery".

Claim 17 is rejected because it is unclear how after the step of discharging, a step of charging results.

Claim 20 is rejected because there is no antecedent basis for "wherein the additives". Also it is unclear what is meant by "are added to the electrolyte along with active components".

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claims 1-3, 6-13 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3, 6-13 of copending Application No. 10/439,258. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 4-5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4-5 of copending Application No.10/439,258. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending Application No. 10/439,258 teaches that the electrolyte contains at least one additive selected from indium, tin, lead sulfate, barium sulfate and mixtures thereof which is claimed in the invention. In addition, the electrolyte containing an antimony is also claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

7. The disclosure is objected to because of the following informalities: In Table 1, the volts should be represented with a period and not a comma as in Battery No. 1, (5,9) should be instead (5.9).

Appropriate correction is required.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ikeda et al. (JP 2001-313064, abstract) teaches a lead storage battery including polyacrylic acid and polyvinyl alcohol in an electrolyte. An additive consisting of stannous sulfate, stannic sulfate and colloid-like lead sulfate. At least 1 kind in a group consisting of polyacrylic acid, polyacrylic acid ester and polyvinyl. Soluble lignin.

Sawai et al. (6,475,676) teaches a lead acid battery comprising a separator containing an organic compound which is preferably lignin. Sawai et al. teaches in column 2, lines 12-21, that the average particle size of the lignin is not larger than 10 um but not less than 0.05 um.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura S Weiner
Primary Examiner
Art Unit 1745

October 27, 2005